

*S/N 09/746,620
Attorney Docket 12008.21USC1
Amendment & Response*

REMARKS

Applicants have amended claims 1-5, 8-9, 33, 37, 40 and 45, canceled claims 6-7, 12-32, 36 and 49-52, and added new claims 53-56. Claims 1-5, 8-11, 33-35, 37-48 and 53-56 are pending. Reconsideration of the claims, as amended, is requested.

The claims have been amended to recite that the sensor nucleic acid has been electrophoretically deposited. Support for this amendment can be found, for example, at page 4, lines 20-22. Additionally, claim 1 has been amended to include the subject matter of original claim 7. In addition to reciting electrophoretically deposited, claim 33 has been amended to include the subject matter of original claim 36. New independent claim 53 is based on claims 9, 10 and 11, and includes the reciting of the electrode diameter. Support for this diameter can be found, for example, at page 5, line 6. New independent claim 54 is based on claims 1, 3, 5 and 8. New independent claim 55 is generally based on claims 33, 34, 35 and 40. And, new independent claim 56 is based on claims 9, 10, 11, and 50. No new matter has been added. Additionally, no additional claim fees are needed for these new claims.

Restriction Requirement

Applicants have canceled claims 12-32 and 49-52, without prejudice, drawn to non-elected inventions.

Priority

Page 1 of the application has been amended to provide a specific reference to the prior applications.

Applicants thank the Examiner for her conscientious review of the provisional applications and International application in relation to the claims. At this time, Applicants do not acquiesce to the correctness of the Examiner's belief, but do not disagree herein.

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Claim Rejections - 102

Claims 1-4 were rejected under 35 U.S.C. 102(b) as anticipated by Heller et al. (WO 97/13870). Claims 1-4 and 6 were rejected as anticipated by Heller et al. (U.S. Patent No. 5,665,222). Claims 1-3 and 6 were rejected as anticipated by Vreeke et al. (U.S. Patent No. 5,534,132), and as anticipated by de Lumley-Woodyear et al. (J. Amer. Chem. Soc.). And, claims 4 and 5 were rejected as anticipated by Heller et al. (U.S. Publication No. 2002/0001799 A1). Applicants disagree with each of these.

Each of the pending claims has been amended to better clarify that the sensor nucleic acid has been electrophoretically deposited in order to form the sensor.

The advantages of having such an element in the sensors (and arrays) are set forth in the Summary of the Invention. See for example, page 4, line 20 through page 5, line 16. Ease and accuracy of deposition of the sensor nucleic acid are improved by using such construction methods, i.e., electrophoretic deposition.

There is no disclosure in any of the cited references of having sensors, as claimed, having electrophoretically deposited sensor nucleic acid. At least for this reason, the claims, as amended, are not anticipated by any of the references. Withdrawal of the rejections is requested.

Claim Rejections - 103

Claims 5 was rejected under 35 U.S.C. 103(a) as unpatentable over Heller et al. (WO 97/13870) in view of Heller et al. (U.S. Publication No. 2002/0001799 A1). Claims 7-11 were rejected as unpatentable over Heller et al. (WO 97/13870) in view of Wohlstadter et al. (U.S. Patent No. 6,207,369). Claims 33-48 were rejected as unpatentable over Heller et al. (WO 97/13870) in view of Wohlstadter et al. and Strategene. Applicants disagree with each of these rejections.

As stated above, the claims have been amended to clarify that the sensor nucleic acid has been electrophoretically deposited. There is no teaching or suggestion in any of the cited references, or combination of the references, of having the sensor nucleic acid electrophoretically

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deposited. At least for this reason, the cited references are lacking in a teaching or suggestion of a recited element, and the claims, as amended, are not obvious. Withdrawal of the rejections is requested.

Double Patenting

Claims 1-4 and 6 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 5,665,222. Applicants do not agree or disagree at this time, but believe that in light of the amendments made herein this double patenting rejection is moot, and request that the rejection be withdrawn.

SUMMARY

Applicants submit that the claims are in proper form for allowance and respectfully request reconsideration and allowance thereof. A Notice of Allowance is requested.

The Examiner is invited to contact the undersigned representative if it will facilitate prosecution of this application.

Respectfully Submitted,

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